

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

Claims 1-16 (Cancelled).

17. (Currently Amended) A method of using a curable thiol-ene formulation comprising:

providing a backing material;

providing on said backing material a layer of a curable thiol-ene formulation comprising:

a polyfunctional mercaptan, and

a vinyl-terminated urethane synthesized from at least one polyester polyol and at least one aliphatic diisocyanate; and

curing said thiol-ene formulation with a curing agent, wherein said layer of said curable thiol-ene formulation has a thickness of about 3 to 4 mils.

18. (Previously presented) The method of using a curable thiol-ene formulation, according to claim 17, further comprising applying said formulation with a hot-melt coater.

19. (Cancelled).

20. (New) The method of using a curable thiol-ene formulation according to claim 17, wherein said vinyl-terminated urethane has a molecular weight, $\langle M_n \rangle$, in the range of 1000 to 50,000.

21. (New) The method of using a curable thiol-ene formulation according to claim 17, wherein said at least one polyester polyol has a molecular weight in the range of from about 1000 to about 3200 AMU.

23. (New) The method of using a curable thiol-ene formulation according to claim 17, wherein said at least one aliphatic diisocyanate is selected from the group consisting of dicyclohexylmethane diisocyanate, IPDI, and TMDI.

24. (New) The method of using a curable thiol-ene formulation according to claim 17, wherein said polyfunctional mercaptan has at least 2 thiol groups.

25. (New) The method of using a curable thiol-ene formulation according to claim 17, wherein said polyfunctional mercaptan is selected from the group consisting of ethylene bis(3-mercaptopropionate), trimethylolpropane tris(2-mercaptoproacetate), trimethylolpropane tris(3-mercaptopropionate), triethyl-1,3,5,-triazine-2,4,6-trione tris(3-mercaptopropionate), pentaerythritol tetrakis(2-mercaptoproacetate), pentaerythritol tetrakis(3-mercaptopropionate), dimethyl bis(3-mercaptopropyl)silane, 1,6-hexanedithiol, 1,10-decanedithiol, and 3,6-dioxaoctane-1,8-dithiol.

26. (New) The method of using a curable thiol-ene formulation according to claim 17, wherein said polyfunctional mercaptan is a 3-mercaptopropionic acid ester of a polyhydroxy compound.

27. (New) The method of using a curable thiol-ene formulation according to claim 26, wherein said polyhydroxy compound is selected from the group consisting of glycols, propylene glycol, butanediol, hexanediol, cyclohexanedimethanol, glycerol, polyethylene glycol, polypropylene glycol, and polyester polyols.

28. (New) The method of using a curable thiol-ene formulation according to claim 17, wherein said polyfunctional mercaptan is trimethylpropane tris(trimercaptopropionate).

29. (New) The method of using a curable thiol-ene formulation according to claim 17, wherein said curable thiol-ene formulation further comprises at least one additive selected

from the group consisting of polymerization inhibitors, antioxidants, tackifiers, flow and leveling agents, pigments, fillers, odor-masking agents, and UV-stabilizers.

30. (New) The method of using a curable thiol-ene formulation according to claim 17, wherein said curing agent is ultra violent light.

31. (New) The method of using a curable thiol-ene formulation according to claim 17, wherein said polyfunctional mercaptan is a dithiol.